News Release

New TAOS, Inc. Light-to-Voltage Converter Provides High Sensitivity, Low Noise and Positive Offset Without Sacrificing Speed

Integrated Light-to-Voltage Optical Converter Well Suited for Use in Low Light-Level Environments

PLANO, TX (October 30, 2000) - Very low levels of light can now be measured with significantly increased accuracy without sacrificing speed through the use of a new light-to-voltage converter from Texas Advanced Optoelectronic Solutions™ (TAOS), Inc. of Plano, TX. The TSL257 integrates a photodiode, operational amplifier and feedback components on a single monolithic IC. A unique architecture gives this device a high level of sensitivity - or responsivity to light - that provides 320 megohms of transimpedance gain (at least 20 times greater than existing devices) while maintaining a 160 microsecond rise time. This optical converter is especially well suited for use in smoke, mark and color detection applications as well as in proximity sensors and ambient light systems for contrast control.

To simplify system dark-level correction, the TSL257 is factory-trimmed for small positive offset. Moreover, the TSL257 is gain trimmed for improved output voltage tolerance, and the output swings rail-to-rail.

"The TSL257 is an excellent example of how 'Lumenology'™ - the TAOS light sensing technology - works," says Carlo Strippoli, TAOS, Inc. vice president of marketing. "By integrating a photodiode, an operational amplifier and feedback components on a single monolithic IC, we are able to offer the marketplace a light-to-voltage converter that provides high sensitivity, low dark offset, and low noise without sacrificing speed, all at an affordable price."

The TSL257 is available now from TAOS, Inc. and its authorized distributors. Supplied in a 3-lead clear plastic sidelooker package with an integral lens, the TSL257 is priced at $0.77 in 1,000-piece quantities.

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